

## ABSTRACT

A high-voltage discharge lamp operating device capable of reducing the size and the weight of a DC-DC converter circuit, and accordingly of the operating device without generating any magnetic saturation of a transformer core part even when igniting a lamp in the operating device for operating a HID head lamp for a vehicle. A PWM control unit (6) comprises a power control unit (31) which receives a voltage detection signal and controls the duty of the signal waveform of a PWM control signal, an error amplifier (32) which compares the output from the power control unit (31) with the reference voltage and outputs an error level signal, an oscillation frequency control means (36) for outputting a rectangular wave signal so as to realize a high frequency for a predetermined period from the ignition of a HID lamp (5) and a low frequency after the elapse of a predetermined period, a triangular wave oscillator (34) which converts the rectangular wave signal into the triangular signal, and a comparator (35) which compares the error level signal with the triangular wave signal and outputs to a switching element (12) the PWM control signal on H-level during the period in which the triangular wave signal is high.